

CURRICULUM VITAE

Personal

Name: Michael T Collins, MD

Country of
Citizenship USA

Birthplace Washington, DC

Education

1975-81 Music, Catholic University, Washington, D.C.
1985-87 B.G.S., University of Maryland at College Park, College Park, MD
1987-88 Post baccalaureate training, University of Maryland at College Park,
College Park, MD
1988-92 M.D., University of Maryland at Baltimore, Baltimore, MD

Post-Doctoral Training

1992-93 Intern, Internal Medicine, University of Maryland, Baltimore, MD
1993-95 Resident, Internal Medicine, University of Maryland, Baltimore, MD
1996 Chief Resident, Internal Medicine, University of Maryland, Baltimore,
MD
1995-98 Fellowship, Endocrinology and Metabolism, Developmental
Endocrinology Branch, National Institutes of Health, Bethesda, MD

Employment

2015-date Tenured, Senior Investigator, Chief, Skeletal Clinical Studies Unit,
Craniofacial and Skeletal Diseases Branch, National Institute of Dental
and Craniofacial Research, National Institutes of Health, Bethesda, MD
2006-2015 Tenure Track Investigator, Chief, Skeletal Clinical Studies Unit,
Craniofacial and Skeletal Diseases Branch, National Institute of Dental
and Craniofacial Research, National Institutes of Health, Bethesda, MD
1999-2006 Staff Clinician, Craniofacial and Skeletal Diseases Branch, National
Institute of Dental and Craniofacial Research, National Institutes of
Health, Bethesda, MD
1998-1999 Clinical Fellow, Craniofacial and Skeletal Diseases Branch, National
Institute of Dental and Craniofacial Research, National Institutes of
Health, Bethesda, MD
1988-1990 Technician, Laboratory of Neuroimmunopathology, Dr. Moon Shin,
University of Maryland Medical School, Baltimore, MD
1986-1988 Biologist, Clinical Psychobiology Branch, National Institute of Mental
Health, National Institutes of Health, Bethesda, MD

Honors and Awards

1977-1981	Music Performance Scholarships, Catholic University Wind Ensemble
1990	MSTP Exchange Fellow Erasmus University, Rotterdam, Netherlands
1990	First Place, Oral Presentations, Medical Student Research Day, University of Maryland Medical School
1992	Rudolf Virchow Prize for Research in Pathology
1992	Leslie B. Barnett Research Fellow in Neurology
1995	Outstanding Senior Resident Award for Excellence in Teaching
1998-2005	NIH Loan Repayment Program
1998	Scientific Director's Travel Award, NIDCR
2001	“MAGIC Kiss” Award, MAGIC Foundation
2006	Constellation Award, Fibrous Dysplasia Foundation
2016	NIDCR Special Act Award

Editorial Responsibilities

2007	Guest Editor	Pediatric Endocrine Reviews
Present	<i>ad hoc</i> Reviewer	
	Lancet	
	Journal of Cell Biology	
	Journal of Bone and Mineral Research	
	Journal of Clinical Endocrinology and Metabolism	
	Endocrinology	
	<i>Acta Paediatrica</i>	
	Post Graduate Medicine	
	Journal of Pediatrics	
	Expert Review of Endocrinology and Metabolism	
	Bone, American Journal of Medical Genetics	
	British Journal of Ophthalmology	
	Anatomical Review	
	Molecular Endocrinology	
	Pediatric Nephrology	
	Endocrine Society Abstracts	
	American Society for Bone and Mineral Abstracts	
	International Society of Bone and Mineral Research Abstracts	

Membership in Professional Societies

Endocrine Society
 American Society of Bone and Mineral Research

Extramural Activities

2003-date	Medical Advisory Committee, The MAGIC Foundation
2004-date	Chair, Medical Advisory Board, Fibrous Dysplasia Foundation
2008	FDA Drug Advisory Committee for Reproductive Health Drugs; New Drug Application Lasofoxifene (Fablyn)
2008	Reviewer, National Cancer Institute, Cancer Prevention and Control Review Committee; A Substudy of the TEXT trial to evaluate serial bone markers for bone remodeling, serial growth factors, and bone mineral density
2009	FDA Drug Advisory Committee for Reproductive Health Drugs; New Drug Application Denosumab
2010	Grant reviewer The French National Research Agency (l'Agence Nationale de la Recherche)
2010-2012	Advisory Board Yale Center for X-Linked Hypophosphatemia
2010	Chair, Organizing Committee International Meeting on Fibrous Dysplasia/McCune-Albright Syndrome and Cherubism NIH, October, 2010
2011	Reviewer, NIAMS Study Section, Special Emphasis Panel (SEP) for applications proposing research related to clinical trials
2011	FDA Joint Advisory Committee for Reproductive Health Drugs and Drug Safety and Risk Management Advisory Committee; Review of the Risks and Benefits of Long-Term Bisphosphonate use for Prevention and Treatment of Osteoporosis
2012	Consultant to US Department of Justice on bisphosphonate use
2013	FDA Joint Advisory Committee for Reproductive Health Drugs and Drug Safety and Risk Management Advisory Committee; Review of the Risks and Benefits of Calcitonin
2014	FDA Committee Member Advancing the Development of Pediatric Therapeutics (ADEPT): Pediatric Bone Health
2014	Advisor to the Amgen XGEVA and Hypocalcemia: Clinical Insights and Management Advisory Board, August, 2014, Boston, MA
2015	Skeletal Rare Diseases Working Group of the International Osteoporosis Foundation

Invited Presentations

1. National Chief Residents Conference, Tucson, AZ, July, 1996. "Should men and women's cardiovascular risk factors be treated the same?"
2. Endocrine Grand Rounds, University of Maryland, Baltimore, MD, March, 1997. "The calcium-sensing receptor."
3. Medical Grand Rounds, University of Maryland, Baltimore, MD, June, 1997. "Primary hyperparathyroidism."
4. Endocrine Grand Rounds, University of Maryland, Baltimore, MD, March, 1998. "Osteoporosis in men."
5. Baltimore Bone Club/Maryland Endocrine Society, Baltimore, MD, March, 1998. "Osteoporosis in men."

6. Endocrinology Update for the Practicing Physician, University of Maryland, Baltimore, MD, October 1998. "Male hypogonadism."
7. Medical Grand Rounds, University of Maryland, Baltimore, MD, March, 1999. "Osteoporosis in men."
8. Endocrine Grand Rounds, National Institutes of Health, Bethesda, MD, July, 1999. "Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome."
9. MAGIC Foundation Annual Convention, Chicago, IL, July 1999, "Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome."
10. Symposium on G_s alpha Diseases, Annual Meeting of the Endocrine Society, Toronto, Canada, June, 2000. "Clinical manifestations of activating G_sα mutations."
11. MAGIC Foundation Annual Convention, Chicago, IL, July 2000, "Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome."
12. Department of Experimental Medicine, University of Rome 'La Sapienza,' Italy, December, 2000, Seminar, "The McCune-Albright syndrome: clarification of the clinical spectrum."
13. MAGIC Foundation Annual Convention, Chicago, IL, July 2001, "Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome."
14. Endocrine Grand Rounds, Johns Hopkins University, Baltimore, Maryland, October, 2001. "Fibrous dysplasia as a model of a bone cell disease."
15. Endocrine Grand Rounds, University of Maryland, Baltimore, Maryland, January 2002. "An osteocentric view of McCune-Albright syndrome; the endocrinologists dream (nightmare)."
16. Endocrine Grand Rounds, Columbia University New York, New York, April, 2002. "An osteocentric view of McCune-Albright syndrome."
17. MAGIC Foundation Annual Convention, Chicago, IL, July 2002, "Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome."
18. Meet the Professor, Annual Meeting of the Endocrine Society, Philadelphia, PA, June, 2003 "McCune-Albright Syndrome and Fibrous Dysplasia."
19. Endocrine Grand Rounds, Creighton University, Omaha, Nebraska, June, 2003: "McCune-Albright Syndrome: The Endocrinologists Dream (Nightmare)"
20. Endocrine Grand Rounds, Indiana University, Indianapolis, Indiana, July, 2003: "McCune-Albright Syndrome: The Endocrinologists Dream (Nightmare)"
21. MAGIC Foundation Annual Convention, Chicago, IL, July 2003, "Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome."
22. Lawson Wilkins Pediatric Endocrine Society Annual Meeting, San Francisco, CA, May, 2004: Chairperson, "Clinical Review: Growth Hormone Issues in Pediatric Patients"
23. Oral and Maxillofacial Surgery Grand Rounds, University of California San Francisco, San Francisco, CA, May 2004: "'Fibrous Dysplasia and the McCune-Albright Syndrome and it's Implications for Oral Maxillofacial Surgery"
24. Endocrine Society Annual Meeting, New Orleans, LA, June, 2004, Oral Presentation, "Serum FGF-23 is Elevated in Patients with Hyperphosphatemia."
25. MAGIC Foundation Annual Convention, Chicago, IL, July 2004, "Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome."
26. Endocrine Society Board Review Course, Instructor, Baltimore, MD, September,

- 2004, “Bone and Mineral Metabolism.”
27. NIH Research Festival, Bethesda, MD, September, 2004, Symposium: cAMP-dependent Protein Kinase Signaling and Human Disease, “McCune-Albright Syndrome, *GNAS* Mutations and Carney Complex.”
 28. University of Maryland, Endocrine Grand Rounds, Baltimore, MD, December, 2004, “New Insights into Vitamin D and Phosphorus Metabolism.”
 29. Endocrine Scholar Lecture, University of Connecticut, Hartford, CT, February, 2005, “New Insights into Vitamin D and Phosphorus Metabolism: Fibrous dysplasia, phosphatonin, and FGF-23.”
 30. Washington Hospital Center, Endocrine Grand Rounds, Washington, D.C., April, 2005, “New Insights into Vitamin D and Phosphorus Metabolism: Fibrous dysplasia, phosphatonin, and FGF-23.”
 31. Visiting Professor in Endocrinology, University of Virginia, Charlottesville, VA, June, 2005, “New Insights into Vitamin D and Phosphorus Metabolism.”
 32. MAGIC Foundation Annual Convention, Chicago, IL, July 2005, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 33. First Regional Meeting of the Fibrous Dysplasia Foundation, New York City, NY, November 2005, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 34. Paget’s Disease of Bone/Fibrous Dysplasia: Advances and Challenges, Fort Lauderdale, FL, January 2006, “Spectrum and Natural History of Fibrous Dysplasia of Bone.”
 35. Washington, D.C Dermatologic Society, May, 2006 “McCune-Albright Syndrome: Clinical Implications of the Molecular and Genetic Pathophysiology”
 36. MAGIC Foundation Annual Convention Chicago, IL, July 2006, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 37. Fibrous Dysplasia Foundation Annual Meeting, Santa Monica, CA, August, 2006. “Update on Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 38. Annual Meeting of the American Society of Bone and Mineral Research, Philadelphia, PA September, 2006, Session Chair, “Other disorders of bone and mineral metabolism II.”
 39. NIH Clinical Center Grand Rounds, Bethesda, MD, January, 2007. “Fibrous dysplasia of bone: natural history, treatment, and insights into mineral metabolism.”
 40. Visiting Professor in Endocrinology, University of Vermont Bone Center, Burlington, VT, April, 2007. “Fibroblast growth factor-23: a bone hormone that regulates mineral metabolism.”
 41. Pediatric Grand Rounds, Georgetown University, Washington, D.C., June, 2007. “Fibrous dysplasia of bone, McCune-Albright syndrome: a rare disease that’s provided many general insights.”
 42. Hypoparathyroid Association Annual Meeting, Arlington, VA, June 2007. “Hypoparathyroidism effects on bones.”
 43. MAGIC Foundation Annual Convention Chicago, IL, July 2007, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 44. American Society of Bone and Mineral Research, Pediatric Bone and Mineral

- Working Group, Honolulu, Hawaii, September 2007, Oral Presentation, “Bone mass in adults and children with hypoparathyroidism.”
45. Fibrous Dysplasia Foundation Annual Meeting, Indianapolis, IN, October, 2007, “Update on Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 46. Endocrine Grand Rounds, University of Maryland, Baltimore, MD, February, 2008, “FGF23, a new bone hormone that regulates mineral metabolism.”
 47. Internal Medicine Grand Rounds, Washington Hospital Center, May, 2008. “The diagnosis and treatment of osteoporosis: a large dose of clinical judgment.”
 48. Annual Meeting of the Hypoparathyroidism Association, Bethesda, MD, June 2008, “Hypoparathyroidism: Effects on bones – what we do and don’t know.”
 49. Ludwig Boltzman Institute of Osteology, June, 2008, Vienna, Austria, Visiting Professor.
 50. MAGIC Foundation Annual Convention Chicago, IL, July 2008, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 51. Yale Center for X-linked Hypophosphatemia, Yale University, New Haven, Connecticut, Guest Speaker Advisory Board Meeting of the YC-XLH, “FGF23: New insights into action and regulation; implications for treatment.”
 52. Endocrine Grand Rounds, Yale University, October, 2008, “McCune-Albright syndrome: how a zebra has taught us many lessons about horses.”
 53. Rare Bone Coalition Meeting, National Institutes of Health, Bethesda, MD, October, 2008, Group Leader and Lecturer, Fibrous Dysplasia.
 54. Fibrous Dysplasia Foundation Annual Meeting, Bethesda, MD, October, 2008, “Update on Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 55. Demystifying Medicine, NIH, March, 2009, “Fibrous dysplasia of bone and McCune-Albright syndrome.”
 56. NIH & FDA Glycosciences Research Day, NIH, May, 2009, “GALNT3 in human diseases.”
 57. Washington Bone Club, Bethesda, MD, June, 2009. “Fibrous dysplasia, FGF23, and osteomalacic bone disorders.”
 58. MAGIC Foundation Annual Convention Chicago, IL, July 2009, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 59. FAES Endocrinology Board Review Faculty, Bethesda, MD, August, 2009. “Osteoporosis” and “Bone Disorders other than osteoporosis.”
 60. Visiting Professor in Endocrinology, Vanderbilt University, September, 2009, Nashville, TN, “FGF23 in pediatric bone diseases.”
 61. Lecturer, European Union Instructional Course in Pediatric Orthopaedics, December, 2009, Tel Aviv, Israel, Various topics.
 62. Parathyroids 2010, Invited speaker, Pisa, Italy, February, 2010. “Use of PTH in hypoparathyroidism.”
 63. Medical Grand Rounds, Clinicopathologic Conference, Massachusetts General Hospital, Discussant, June, 2010, Boston, MA.
 64. Endocrine Society, Invited seminar speaker, June, 2010, San Diego, CA, “Gs alpha in bone.”
 65. MAGIC Foundation Annual Convention Chicago, IL, July 2010, “Polyostotic

- fibrous dysplasia of bone and McCune-Albright syndrome.”
66. FAES Endocrinology Board Review Faculty, Bethesda, MD, August, 2010. “Osteoporosis” and “Bone disorders other than osteoporosis.”
 67. Endocrine Grand Rounds, National Institutes of Health, “Phosphate diabetes and rickets: the role of FGF23 in mineral metabolism,” Bethesda, MD, October, 2010.
 68. Federal Working Group on Bone Diseases, NIH, Bethesda, MD, March, 2011, “Update on FGF23 in bone and mineral metabolism.”
 69. Endocrine Grand Rounds, University of Pittsburgh, Pittsburgh, PA, March, 2011. “Phosphate diabetes and rickets: the role of FGF23 in mineral metabolism.”
 70. Fifth International Hypoparathyroidism Patient Conference, Bethesda, MD, June, 2011. “New and future therapies for treating hypoparathyroidism”
 71. PDE 2011: Second International Workshop on cyclic AMP, protein kinase and phosphodiesterases, Bethesda, MD, June, 2011. “Fibrous dysplasia: a model for the study of cAMP in bone.”
 72. MAGIC Foundation Annual Convention Chicago, IL, July 2011, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 73. FAES Endocrinology Board Review Faculty, Bethesda, MD, September, 2011, “Osteoporosis” and “Bone Disorders other than osteoporosis.”
 74. Bone Seminar Series, FDA: CDRH/CBER/CDER, Silver Spring, MD October, 2011, “FGF23: from phosphate diabetes to drug targets”
 75. Grand Rounds, Hospital for Special Surgery, New York, NY, December, 2011, “The central role of FGF23 in skeletal mineral metabolism.”
 76. Pediatric Endocrine Society of Texas, Oklahoma, Louisiana, and Arkansas, Houston, TX, January, 2012, “Update on fibrous dysplasia and McCune-Albright syndrome.”
 77. Canadian Pediatric Endocrine Group, Winnipeg, Manitoba, Canada, February, 2012, “FGF-23 and its role in pediatric mineral metabolism.”
 78. Nephrology Grand Rounds, University of Miami, Miami, FL, February, 2012, “FGF23 regulation, processing, and action; implications for current and future treatment”
 79. Endocrinology Grand Rounds, George Washington University, Washington, DC, March, 2012, “Fibroblast growth factor-23: Regulation, processing, and action; Implications for current and future treatment.”
 80. Endocrine Grand Rounds, Johns Hopkins University, Baltimore, MD, May, 2012, “McCune-Albright Syndrome: the crème de la crème of endocrinology.”
 81. Hypoparathyroidism Association Annual Meeting 2012, Bethesda, MD, June, 2012, “What are the differences between the different kinds of hypoparathyroidism.”
 82. NIH Glycosciences Research Day 2012, Bethesda, MD, June, 2012, “The role of glycosylation in the regulation of mineral metabolism.”
 83. MAGIC Foundation Annual Convention Chicago, IL, July 2012, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
 84. Rare Bone Diseases Research Summit, Johns Hopkins University, Baltimore, MD, September, 2012, “Fibrous dysplasia.”
 85. FAES Endocrinology Board Review Faculty, Bethesda, MD, September, 2012, “Osteoporosis” and “Bone Disorders other than osteoporosis.”

86. Department of Medicine Grand Rounds, Washington Hospital Center, Washington, D.C., February, 2013, “Osteoporosis.”
87. Advances in Mineral Metabolism, Snowmass, CO, April, 2013, “Activating $G_s\alpha$ mutations and FGF23-mediated phosphate wasting in fibrous dysplasia.”
88. Advances in Mineral Metabolism, Snowmass, CO, April, 2013, Meet the Professor, “Clinical disorders of FGF23 – too much and too little.”
89. 16th Workshop on Vitamin D, Invited Speaker, San Francisco, CA, June, 2013, “Tumor-induced osteomalacia as a model for the study of mineral metabolism.”
90. Annual Meeting of the Endocrine Society, San Francisco, CA, June, 2013, Oral Session Chair, “Disorders of calcium homeostasis.”
91. MAGIC Foundation Annual Convention Chicago, IL, July 2013, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
92. Third International Workshop on cAMP signaling, Protein kinase A, and phosphodiesterases: from genetics to function and human diseases, Invited Speaker, Paris France, July, 2013, “The role of cAMP signaling bone pathophysiology and physiology.”
93. FAES Endocrinology Board Review Faculty, Bethesda, MD, September, 2013, “Osteoporosis” and “Bone Disorders other than osteoporosis.”
94. Endocrine Grand Rounds, University of Maryland Medical System, Baltimore, MD, December, 2013, “Skin and bones; Ras and FGF23: a mosaic story.”
95. Department of Medicine Grand Rounds, Georgetown University, Washington, D.C., December, 2013, “Fibroblast Growth Factor-23: A new hormone with important roles in health and disease.”
96. Endocrine Grand Rounds, George Washington University Department of Endocrinology, Washington, DC, December, 2013, “Fibroblast Growth Factor-23: A new hormone with important roles in health and disease.”
97. Inaugural International Lymphangiomatosis & Gorham’s Disease Alliance Patient - Family Conference, Dallas, TX, June 2014, “Similarities and Differences Between Lymphangiomatosis /Gorham-Stout Disease and Fibrous Dysplasia of Bone: Implications for Treatment.”
98. MAGIC Foundation Annual Convention Chicago, IL, July 2014, “Polyostotic fibrous dysplasia of bone and McCune-Albright syndrome.”
99. American Society of Bone and Mineral Research, Houston, TX, September, 2014, Meet the Professor, “Fibrous dysplasia.”
100. American Society of Bone and Mineral Research, Houston, TX, September, 2014, Oral Session Chair, “Bone Disease in Children and Adolescents”
101. European Pediatric Endocrine Society, Dublin, Ireland, September, 2014, Bone and Growth Plate Working Group, “Denosumab as an emerging therapy in pediatric metabolic bone diseases.”
102. European Pediatric Endocrine Society, Dublin, Ireland, September, 2014, Disorders of $G_s\alpha$ Signaling, “McCune-Albright Syndrome.”
103. Annual Meeting of the Fibrous Dysplasia Foundation, New York City, October, 2014, “Overview of Fibrous Dysplasia.”
104. Symposium on Metabolic Bone Disease and Genetic Defects of Calcium-Phosphate Homeostasis, Karolinska Institute, Stockholm, Sweden, November, 2014, “Skeletal and extraskkeletal manifestations of McCune-Albright syndrome.”

105. The Robert M. Blizzard Lectureship of the Annual Meeting of the Pediatric Endocrine Society, San Diego, CA, April, 2015, “McCune-Albright Syndrome: A Mosaic Disease of $G_s\alpha$ Signaling.”
106. First International Conference on The Diagnosis, Management and Treatment of Hypoparathyroidism, Florence, Italy, May, 2015, “The vitamin D/FGF23/PTH axis.”
107. Endocrine Grand Rounds University of Maryland, Baltimore, MD, June, 2015, “The Role of Fibroblast Growth Factor-23 in Mineral and Skeletal homeostasis”
108. Invited Speaker, Fibrous Dysplasia Support Society Patient Meeting, Oxford, UK, October, 2015, “Fibrous Dysplasia/McCune-Albright Syndrome”
109. Masterclass in Fibrous Dysplasia, IOF CSA Skeletal Rare Diseases / FDSS / NIHR RD TRC RUDY Meeting, Oxford, UK, October, 2015, “Clinical Management of Adult FD/MAS”
110. Endocrine Grand Rounds, Yale University, New Haven, CN, May, 2016, “Progress in understanding the physiology and treatment of FGF23 disorders; from men to mice and back”
111. 2nd International Meeting on Generalized Lymphatic Anomaly and Gorham-Stout disease, Atlanta, GA, June, 2016; Moderator Session on Medical Treatment of Gorham-Stout disease.

NIH Intramural Activities (outside the NIDCR DIR)

1998-1999	Fellow Liaison, Interinstitute Endocrine Training Program
1998-date	Member, Hard Tissue Disorders Special Interest Group
1999-date	Faculty and Program Planning Committee, Interinstitute Endocrine Training Program, NIH
2000-date	Attending, Endocrine Consult Service (one month per year)
2000-date	Attending, Metabolic Diseases Branch, NIDDK (one month per year)
2000-date	Member NIH Hard Tissues Interest Group
2004	Search Committee, Staff Scientist, Genetic Diseases Branch, NICHD
2004-2102	Mentor, Clinical Research Training Program
2007	Advisory Panel, Proteus Syndrome, NIH, Bethesda, MD
2008-date	Senior Consultant, NIH Undiagnosed Diseases Program
2008-2012	Tutor and Faculty, Clinical Research Training Program
2009-date	Member Interinstitute Matrix Club
2012-date	Faculty, Tutor, Mentor, Medical Research Scholars Program
2014-date	Mentoring Committee Rebecca Brown, MD, Lasker Clinical Research Scholar, Tenure Track Investigator, NIDDK
2015	Search Committee, BTRIS Chief
2015	Search Committee, Tenure Track Investigator, Metabolic Diseases Branch, NIDDK

NIDCR DIR Intramural Activities

1999-2009	Member, Institutional Review Board, NIDCR
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2007-date	NIDCR DIR Administrative Liaison Committee
2010-date	Organizer, Faculty Lead NIH Interinstitute Endocrine Training Program Research Oversight and Career Development Committee
2012-date	Member NIH Interinstitute Endocrine Training Program Applicant Selection Committee
2014	Member Search Committee Tenure Track position OPCB, NIDCR
2015	Associate Program Director NIH Interinstitute Endocrine Training Program

Clinical Protocols

Principle Investigator

1. 98-D-0145: "Screening and natural history of patients with polyostotic fibrous dysplasia and the McCune-Albright Syndrome" (since 2006).
2. 01-D-0184: "Evaluation and treatment of skeletal diseases"
3. 01-D-0197: "A Study of the Effects of Pegvisomant on Growth Hormone Excess in McCune-Albright Syndrome" (completed)
4. 05-D-0050: "Selective Venous Catheterization for the Localization of Phosphaturic Mesenchymal Tumors" (completed)
5. 06-D-0188: "Physiologic Regulation of FGF23" (closed)
6. 14-D-0145: "A Phase 2a Open-label Dose Escalation Study to Evaluate the Safety, Tolerability, Pharmacodynamics, and Pharmacokinetics of an NPSP795 Infusion in Patients with Autosomal Dominant Hypocalcemia Resulting from Mutations in the Calcium Sensing Receptor Gene: A Repurposing Study"
7. T-D-0041: "An Open Label Pilot Study of Denosumab Treatment for Fibrous Dysplasia"

Lead Associate Investigator

1. 98-D-0146: "A randomized, placebo-controlled trial of alendronate in the treatment of polyostotic fibrous dysplasia and the McCune-Albright Syndrome" (completed)
2. 00-D-0183; "A pilot study of the effects of the aromatase inhibitor letrozole on pubertal progression and indices of bone turnover in girls with precocious puberty and the McCune-Albright syndrome" (completed)
3. 07-D-0016: "Effects of PTH Replacement on Bone in Hypoparathyroidism"
4. 13-D-0025: "Open-label Dose-titration Study of the Tolerability and Efficacy of Cinacalcet to Treat Fibroblast Growth Factor 23 (FGF23)-mediated Hypophosphatemia"

Associate Investigator

1. 91-DK-0085: "Studies of Hyperparathyroidism and Related Disorders"
2. 93-DK-0127: "Family Studies in Metabolic Diseases and Mineral Metabolism"
3. 94-D-0188: "Bone regeneration with marrow stromal cells"
4. 00-I-0159: "Natural history, management, and genetics of hyperimmunoglobulin E recurrent infection (Jobs) syndrome"

5. 03-DK-0098: “Study of Thyrotropin Releasing hormone in Patients with Thyroid or Pituitary Abnormalities
6. 04-CC-0046: “Citrate Effects and Bone Density in Long-Term Apheresis Donors”
7. 09-D-N046: “Procurement of Normal Bone and Abnormal Bone, Dermis and Adipose Tissue for Establishment of Cell Culture and Tissue Analyses” (completed)
8. 13-C-0193 B “Evaluation of ⁶⁸Gallium- DOTATATE PET/CT for detecting Primary and Metastatic Neuroendocrine Tumors”

Animal Protocols

1. 08-484: Principal Investigator, “Transplantation of rare human connective tissue tumors into immunocompromised mice”
2. 10-579: Co-investigator, “Parathyroid hormone gene transfer to rat salivary gland for the correction of hypoparathyroidism”
3. 13-709; Principal Investigator, “Mouse Models for the Study of Cutaneous Skeletal Hypophosphatemia Syndrome”

Cooperative Research and Development Agreements, Material Transfer Agreements

1. Bone biopsy specimens from Protocol 07-D-0016 from NIH to Drs. David Dempster (Columbia University, New York, NY) and Klaus Klaushofer (Ludwig Boltzmann Institute, Vienna, Austria)
2. Phosphaturic tumors from protocol 01-D-0184 to Dr. Michael Mannstadt (Harvard University, Boston, MA)
3. Phosphaturic tumors from protocol 01-D-0184 to Dr. Suzanne Jan de Beur (Johns Hopkins University, Baltimore, MD)
4. Blood specimens for analysis of FGF23 glycosylation from Dr. Isidro Salusky (University of California at Los Angeles)
5. Blood specimens from patients with various disorders of FGF23 to Dr. Lance Wells (University of Georgia)
6. CRADA NPS Pharmaceuticals (T-2013-2081); Clinical trial 14-D-0145, “A Phase 2a Open-label Dose Escalation Study to Evaluate the Safety, Tolerability, Pharmacodynamics, and Pharmacokinetics of an NPSP795 Infusion in Patients with Autosomal Dominant Hypocalcemia Resulting from Mutations in the Calcium Sensing Receptor Gene: A Repurposing Study”; Support: study drug, clinical study monitoring, clinical database, financial (\$100K)
7. Human materials MTA Amgen Pharmaceuticals to measure RANKL and OPG in the serum of subjects with fibrous dysplasia of bone
8. CRADA NPS/Shire Pharmaceuticals (T-2015-2844); “FGF23 TREATMENT OF Galnt3-DEFICIENT MICE”; preclinical study of the efficacy of the feasibility of FGF23 for the treatment of familial tumoral calcinosis; Support: recombinant FGF23 (\$30K), financial (salary support, reagents, etc., \$260K)
9. CRADA Amgen; drug and funding to support clinical trial “An Open Label Pilot

Study of Denosumab Treatment for Fibrous Dysplasia”

Bibliography**Peer-Reviewed Research Articles**

1. Lee SC, Collins M, Vanguri P, Shin ML 1992 Glutamate differentially inhibits the expression of class II MHC antigens on astrocytes and microglia. *J Immunol* **148**(11):3391-3397.
2. Hussain A, Zimmerman CA, Boose JA, Froehlich J, Richardson A, Horowitz RS, Collins MT, Lash RW 1996 Large scale synthesis of recombinant human thyrotropin using methotrexate amplification: chromatographic, immunological, and biological characterization. *J Clin Endocrinol Metab* **81**(3):1184-1188.
3. Collins MT, Skarulis MC, Bilezikian JP, Silverberg SJ, Spiegel AM, Marx SJ 1998 Treatment of hypercalcemia secondary to parathyroid carcinoma with a novel calcimimetic agent. *J Clin Endocrinol Metab* **83**(4):1083-1088.
4. Bianco P, Riminucci M, Majolagbe A, Kuznetsov SA, Collins MT, Mankani MH, Corsi A, Bone HG, Wientroub S, Spiegel AM, Fisher LW, Robey PG 2000 Mutations of the GNAS1 gene, stromal cell dysfunction, and osteomalacic changes in non-McCune-Albright fibrous dysplasia of bone. *J Bone Miner Res* **15**(1):120-128.
5. Collins MT, Remaley AT, Csako G, Pucino F, Skarulis MC, Balow JE, Sarlis NJ 2000 Increased levothyroxine requirements presenting as "inappropriate" TSH secretion syndrome in a patient with nephrotic syndrome. *J Endocrinol Invest* **23**(6):383-392.
6. Collins MT, Chebli C, Jones J, Kushner H, Consugar M, Rinaldo P, Wientroub S, Bianco P, Robey PG 2001 Renal phosphate wasting in fibrous dysplasia of bone is part of a generalized renal tubular dysfunction similar to that seen in tumor-induced osteomalacia. *J Bone Miner Res* **16**(5):806-813.
7. Collins MT, Riminucci M, Corsi A, Murphey MD, Wientroub S, Bianco P, Robey PG 2001 Angiomatosis of bone with localized mineralization defect. *J Bone Miner Res* **16**(10):1750-1753.
8. Riminucci M, Collins MT, Corsi A, Boyde A, Murphey MD, Wientroub S, Kuznetsov SA, Cherman N, Robey PG, Bianco P 2001 Gnathodiaphyseal dysplasia: a syndrome of fibro-osseous lesions of jawbones, bone fragility, and long bone bowing. *J Bone Miner Res* **16**(9):1710-1718.
9. Akintoye SO, Chebli C, Booher S, Feuillan P, Kushner H, Leroith D, Cherman N, Bianco P, Wientroub S, Robey PG, Collins MT 2002 Characterization of gsp-mediated growth hormone excess in the context of McCune-Albright syndrome. *J Clin Endocrinol Metab* **87**(11):5104-5112.
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